Luo Gu

List of Publications by Citations

35 papers	5,625 citations	23 h-index	37 g-index
37 ext. papers	6,575 ext. citations	16.1 avg, IF	5.89 L-index

#	Paper	IF	Citations
35	Biodegradable luminescent porous silicon nanoparticles for in vivo applications. *Nature Materials*, **2009**, 8, 331-6	27	1527
34	Hydrogels with tunable stress relaxation regulate stem cell fate and activity. *Nature Materials*, **2016**, 15, 326-34	27	1153
33	Substrate stress relaxation regulates cell spreading. *Nature Communications*, **2015**, 6, 6364	17.4	485
32	Bioresponsive mesoporous silica nanoparticles for triggered drug release. *Journal of the American Chemical Society*, **2011**, 133, 19582-5	16.4	303
31	Biomaterials and emerging anticancer therapeutics: engineering the microenvironment. *Nature Reviews Cancer*, **2016**, 16, 56-66	31.3	266
30	In vivo time-gated fluorescence imaging with biodegradable luminescent porous silicon nanoparticles. *Nature Communications*, **2013**, 4, 2326	17.4	249
29	Porous silicon nanoparticle photosensitizers for singlet oxygen and their phototoxicity against cancer cells. *ACS Nano*, **2011**, 5, 3651-9	16.7	242
28	Mechanical confinement regulates cartilage matrix formation by chondrocytes. *Nature Materials*, **2017**, 16, 1243-1251	27	220
27	In vivo clearance and toxicity of monodisperse iron oxide nanocrystals. *ACS Nano*, **2012**, 6, 4947-54	16.7	161
26	Liposomal Delivery Enhances Immune Activation by STING Agonists for Cancer Immunotherapy. *Advanced Biology*, **2017**, 1, 1600013	3.5	122
25	Biphasic ferrogels for triggered drug and cell delivery. *Advanced Healthcare Materials*, **2014**, 3, 1869-76	10.1	105
24	Magnetic luminescent porous silicon microparticles for localized delivery of molecular drug payloads. *Small*, **2010**, 6, 2546-52	11	95
23	Multivalent porous silicon nanoparticles enhance the immune activation potency of agonistic CD40 antibody. *Advanced Materials*, **2012**, 24, 3981-7	24	80
22	Size Control of Porous Silicon Nanoparticles by Electrochemical Perforation Etching. *Particle and Particle Systems Characterization*, **2014**, 31, 252-256	3.1	77
21	Hydrogel substrate stress-relaxation regulates the spreading and proliferation of mouse myoblasts. *Acta Biomaterialia*, **2017**, 62, 82-90	10.8	72
20	Substrate Stress-Relaxation Regulates Scaffold Remodeling and Bone Formation In Vivo. *Advanced Healthcare Materials*, **2017**, 6, 1601185	10.1	68
19	Material microenvironmental properties couple to induce distinct transcriptional programs in mammalian stem cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E8368-E8377	11.5	67

18	The effect of surface modification of mesoporous silica micro-rod scaffold on immune cell activation and infiltration. *Biomaterials*, **2016**, 83, 249-56	15.6	65
17	Biomaterials as vectors for the delivery of CRISPR-Cas9. *Biomaterials Science*, **2019**, 7, 1240-1261	7.4	52
16	Tissue-engineered blood-brain barrier models via directed differentiation of human induced pluripotent stem cells. *Scientific Reports*, **2019**, 9, 13957	4.9	44
15	RNA-seq reveals diverse effects of substrate stiffness on mesenchymal stem cells. *Biomaterials*, **2018**, 181, 182-188	15.6	40
14	Sequential release of nanoparticle payloads from ultrasonically burstable capsules. *Biomaterials*, **2016**, 75, 91-101	15.6	37
13	Structurally Dynamic Hydrogels for Biomedical Applications: Pursuing a Fine Balance between Macroscopic Stability and Microscopic Dynamics. *Chemical Reviews*, **2021**, 121, 11149-11193	68.1	30
12	Single-Shot Mesoporous Silica Rods Scaffold for Induction of Humoral Responses Against Small Antigens. *Advanced Functional Materials*, **2020**, 30, 2002448	15.6	17
11	Alginate Hydrogels for Bone Regeneration: The Immune Competence of the Animal Model Matters. *Tissue Engineering - Part A*, **2020**, 26, 852-862	3.9	14
10	Detection of protease activity by FRET using porous silicon as an energy acceptor. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 1374-1376	1.6	7
9	Probing Membrane Protein Association Using Concentration-Dependent Number and Brightness. *Angewandte Chemie - International Edition*, **2021**, 60, 6503-6508	16.4	4
8	The living interface between synthetic biology and biomaterial design.. *Nature Materials*, **2022**, 21, 390-397	27	4
7	Submolecular Tuning of Ligand Size and Spacing for Dynamic Macrophage Modulation.. *Advanced Materials*, **2022**, e2110340	24	4
6	Nanoparticles for Imunotherapy: Multivalent Porous Silicon Nanoparticles Enhance the Immune Activation Potency of Agonistic CD40 Antibody (Adv. Mater. 29/2012). *Advanced Materials*, **2012**, 24, 4025-4025	24	1
5	Functional heterogeneity of IFN-□licensed mesenchymal stromal cell immunosuppressive capacity on biomaterials. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
4	Scaffold Vaccines for Generating Robust and Tunable Antibody Responses. *Advanced Functional Materials*,2110905	15.6	0
3	Probing Membrane Protein Association Using Concentration-Dependent Number and Brightness. *Angewandte Chemie*, **2021**, 133, 6577-6582	3.6	0
2	Deep learning identification of stiffness markers in breast cancer.. *Biomaterials*, **2022**, 285, 121540	15.6	0
1	Drug delivery: Magnetic Luminescent Porous Silicon Microparticles for Localized Delivery of Molecular Drug Payloads (Small 22/2010). *Small*, **2010**, 6, 2545-2545	11	